



SOUHEGAN WATER MANAGEMENT PLANNING AREA COMMITTEE

NH Rivers Management and Protection Program
New Hampshire Department of Environmental Services
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October 16, 2007

Milford Town Hall – Banquet Hall, Milford NH

Minutes taken by Lisa Fortier, Executive Secretary, DES Watershed Management

Attendance

Members: Representative D.L. Chris Christensen (Merrimack), Peter de Bruyn Kops (Agricultural Interests), Stephen Densberger, Nelson Disco (Merrimack), Lawrence Major; George May (Souhegan Watershed Association), Timothy O'Connell (Milford), Robin Warren (Amherst Country Club).

Nonmembers: Larry B. Anderson (Milford Waters Utilities Superintendent), Robert Courage (Milford Water and Sewer Commission), Al Larson (Normandeau Associates), John Magee (Fish & Game), William Mahar (Town of Milton), Mark A. Nelson (Pike Industries), Tom O'Neil (Pike Industries), Minda Shaheen (Nashua Regional Planning Commission), Carl Paulsen, Jamin Warren (Amherst Country Club), Wayne Ives, Brandon Kernen (DES Water Supply) Lisa Fortier (DES Watershed Bureau)

2:30 – 3:15 Overview of the Souhegan PISF Report - Wayne Ives, NH DES

Wayne Ives gave a review of the process to date, the PISF Executive Summary, and the Water Management Plan. The technical work is mostly done and the next step is developing the water management plans. The last meeting was held on July 17, 2006. The Executive Summary (handout) is an abbreviated version of the 800 page PISF report. The Commissioner will review the full PISF report and will decide whether to establish the flows recommended by the study and the report. If so they will become Water Quality Standards. The new Water Quality Standard will then become part of any permit that is granted on the Souhegan River.

The information that was required to develop the PISF has been laid out in statute, which was then translated into the ISF rules. ENV WS 1900 are the instream rules that define how the instream flow rules are developed and what has to be done to establish them. The statutes that apply are RSA 483, the Rivers Management Protection Program, which designates rivers or segments of rivers and also includes the instream flow requirements. Those requirements were augmented and refined into a pilot program for the Lamprey and the Souhegan Rivers by what is known as the Laws of 2002, Chapter 278, which limits the instream flow requirements to the Lamprey and the Souhegan but includes a committee structure as part of the process. The rules were developed, then instream studies and then protected flows were recommended based on the scientifically accepted ecological methods. The study was presented for public review and a public hearing was held on March 21, 2007. A public comment period extended through April 20th and part of the report includes the comments that were received and DES' responses to those comments. The study required identified and cataloging of IPUOCRs (instream public uses, outstanding characteristics, and resources). These are listed in the statute and referenced in the rules. Those uses, characteristics and resources have been documented by an in-stream survey. The survey had a direct observation requirement to look for fish, wildlife, insects, recreational uses and all of the listed protected uses. There is also a requirement to identify and document methods for assessing flow needs for all the protection entities, including designated uses, public uses, and outstanding characteristics. Some of those have characteristics that are amenable to certain assessment techniques. The biological techniques require biological field assessments. The assessment of hydropower dams requires discussion with hydropower users. The recreational uses require surveys to assess recreational preferences. Riparian vegetation required methods that looked at

river transects and elevation differences between different levels of flow, and where certain plants on the margins of the river were actually occurring in relation to those flow.

There were a number of different techniques that had to be identified for the protected flow process. The field survey was conducted in 2004 and a report came out in October 2004 that documented the entities identified in the river and which of those entities were flow dependent. Flow dependent entities include fish, riparian vegetation, recreational uses and hydropower are flow dependent, but geology is not. The report documented the existence and location of flow dependent entities and defined the best assessment methods for each type. The PISF study determined and documented the scientifically protected instream flow based on applying these methods. Wayne discussed the various parts of the PISF report and its appendices.

Questions on Wayne's Presentation

Tim O'Connell – Can you go back to the rating curve and run that by us again? What is on the left axis where you have habitat WA?

Wayne Ives – WA is weighted [habitat] area. These (see slide) areas are all measured and when the flows change, if flow went up then this area would actually increase in size and it might become more suitable. What you are going to see is an expansion and contraction of habitat depending on the amount of stream flow. Some species prefer higher flows and some prefer lower and we have to do this assessment of habitat needs for a number of different species. The result is that each time you do this at a certain flow you have a certain amount of area that is considered optimal and a certain amount of area that is considered suitable. Now if you take another condition in which the stream flows higher and then map those areas again you have a different of flow and a change in the area that is suitable and optimal resulting in curves showing the change in habitat area versus flow

Tim O'Connell – So at 0.5 cfs/m there is enough flow that it will not make a difference because you have leveled out?

Wayne – This is the maximum amount of habitat available. At 0.5. As you increase flows above 0.5 cfs/m, habitat doesn't increase in area because the river is accommodating and shifting the habitat to different places but it is not increasing the habitat area, but as you reduce flow you see some reduction in the available habitat.

There are habitat-versus-flow curves like these for each of the species, and these are done at multiple sites on the river, and applied to different times of the year. They all come from the mapping that is done at the different flow levels and the changes in these hydromorphologic areas that happen with changing flow. It all goes back to the original mapping with types of habitats and the information that was measured in the field such as velocity, depth, and substrate. Each individual hydromorphologic unit has a number of different measurements used to assess its suitability. Each of those unit areas is then measured at each flow level and mapped, and documented.

The result is a division of the year into six periods. This is because it wouldn't make sense to develop the flows tied to high spring flows or to low summer flows because they won't be met and then the spring flows, which have ecological purposes, are not going to be met. We have divided the year into six bio-periods. Bio-periods represent fishery needs, such as a rearing and growth period in the early summer through late summer. Salmon spawning is a specific interval later than rearing and growth followed by an over wintering period. The spring flood period is followed by the Shad spawning period. There is a generic reference adult fish spawning period in the late spring and early summer.

The Souhegan River was also physically divided up into two parts because the upper part is markedly different from the lower part. The upper section is steeper and has different environmental conditions. It changes from one nationwide eco-region to another. There is a change in slope and the

size of the watershed near the dividing point because Stony Brook comes in and changes the watershed.

Protected Flows were provided for both the Upper and Lower Souhegan. We are trying to protect using the Natural Flow Paradigm, which suggests that in order for a river to function normally it has to have high and low flows during the year and during periods within the year. We couldn't decide on a single flow that matched what we were trying to accomplish in protecting the natural variability of flows so three flows that represent the range of flows and duration within those bio-periods were selected. The Natural Flow Paradigm suggests certain low flows are going to occur for a certain length of time. We are presenting a level of flow that represents the common, critical and rare flow levels. Each flow has an allowable duration. During each segment of year, or bio-period, we have developed a common flow that has a magnitude and duration that is acceptable. Somewhere between the allowable duration and catastrophic duration is when the water management plan activities will begin.

Nelson Disco – You have on that chart a rare flow of ten cubic feet. Has that been documented? Has it been that low?

Wayne – Yes, I'm sure it has been. This is 10 cfs at this point. This is the Souhegan River Station 25. We set up a temporary gage upstream. It is not representative of the stream flow at Merrimack, which is much further downstream and has a bigger watershed area. So when the flow is 10 cfs in the Upper it is much higher than at the gage on the Lower Merrimack. I am sure that flows below 10cfs have occurred in the upper watershed. The cfsm value allows us to go from the index location in the Upper or Lower Souhegan and move up and down the Designated River to a point that may have a bigger or smaller watershed area than the reference location. The cfsm values allow us to translate the flow magnitudes to locations up and downstream from the index locations using area transposition.

Nelson Disco – The common flow in the lower river is less than the flow in the upper river.

Wayne – In the upper river the flows have different requirements, probably because of a specific species that occurs there. That is a requirement for the upper watershed that is not needed in the lower because the fish species are different. Part of the process included defining the fish communities in the upper and lower Souhegan. We ended with different fish species in the upper because of its different geography than in the lower. During the shad spawning period, different flows are needed in the upper river than the in the lower because species in the lower have lower flow needs than the fish species on the upper.

The transect method identified certain levels of flow to support certain species. Certain riparian vegetation, such as the silver maple and sycamore flood plain forest, require a scouring flow to remove competition in their understory, but only on a rare basis. Wetlands areas need a small influx monthly to maintain the wetland pools. We are trying to match the natural flow conditions to support the protected entities and species that occur in the watershed along the designated river. There are levels of flow that have to happen a certain number of times during certain periods of the year that were identified using the transect method. The information for recreational uses and hydropower were done in a different method. The target fish flow protection table has the flows that ended up as the driving force in the protected flows.

Once the 60 day public comment period closed (April 20, 2007), DES was supposed to issue a decision on establishing the protected flows in the report. However we didn't make the 60-day limit for issuing a decision because it has taking longer to document the comments, issue responses, and make revisions.

The decision to establish the protected flows must state the scientific basis for the establishment of the flows. It has to state how the established flows will meet water quality standards and include the impacts of the protected flows on hydropower, which will probably happen in the water management plan because we won't know what the effects are until we define the water management plans. The

protected flows themselves have no impact but the water management plans may have an impact. The summary of the comment and responses are in Appendix 18. Copies of the decision will be provided to all the persons who are identified in ENV-Ws 1905.3(E), those who submitted written comments or requested a copy of the notice of the established flows. Everyone on the database list for these meetings will automatically receive a copy of the decisions and access to the report on the DES internet site for download the report.

The protected flows in the report will become part of the water quality standard and will become part of the permit process. Instream flows will have to be considered when that permit is submitted. For the water management plan implementation the state will need to inform water users and dam owners where river conditions stand in relationship to the protected flows. That includes both magnitude and duration. A webpage will be created for people to see where stream flows are relative to the protected instream flows. It will be an automatic projection of USGS data to the webpage as a graphic and as a table that includes magnitude and duration. All the protected levels of flow and the daily values for stream flow will be identified. When a stream flow is below the common flows for a long time but hasn't exceeded the acceptable duration and magnitude and then it goes above the common flow for two days, it resets the duration counting clock.

We expected the report to be completed by now. The technical part of this process took a year longer than we planned and both programs started later so we missed an entire field season for the Lamprey. So both programs are going longer than planned and will go out through 2009. There is a bill in the legislature now to extend the duration for two years for all of the deadlines in the process.

3:22 – 3:30 Recessed for a short break

3:00 – 4:15 The Water Management Plan Process – Al Larson, Normandeau Associates

PowerPoint presentation described the water management plan process that outlined who is affected, the components of the plan, how an affected water user, dam owner, or committee member can help in the process. Dams under ten acres and those scheduled for removal are not included. Federal, municipal and private dams were included and those used for hydropower, municipal water supply, flood control and recreation. Water users have to be within 500ft of the designated river or a tributary. Water users will only be affected if they withdraw more than 20,000 gallons per day over a seven day period or 600,000 gallons of water over any 30-day period.

Affected users in the Souhegan included agriculture, aquaculture, bottled water, hydropower, irrigation, mining, private and public water supplies, and municipal sewage treatment plants. The Water Management Plan consists of three components: conservation, water use, and dam. If you are a water user the conservation plan and water use plans will apply. Conservation measures and best management practices (BMP's) will be developed for each type of affected water user. A report documenting water use patterns needs to be developed for potential use conservation. Each water user will have an implementation plan and an economic assessment. Profiles were developed from a questionnaire that was sent to the water users, which can be found in the Appendices of the PISF report. Water use records were obtained from DES. Draft versions of individual conservation plans will be submitted to the water user for evaluation, which will then be used to develop the water management plan.

The water use plan also applies to all affected water users. The focus on the water use plan is water use, patterns, and need. When are the water users using the water and what does that leave and what is the possibility for water use modification or sharing. The plan will include data from the conservation plans and water use patterns and needs. For each of the affected water users we will identify when they are using the water, how much is being used, what the need is and if there can be

any modifications to that. The overall objective is to have sufficient water in the Souhegan River to meet the protected instream flows.

We need to talk to the PUC about the hydropower facilities, which we have not done yet. Then we will develop an individual water use plan for each of the affected water users, which will take into consideration that there will be dam management plans for the affected dam owners so both can work to maintain the flow in the Souhegan to meet the protected instream flows. We will have to come up with an implementation schedule with the individual affected water users relative to the water use plan and then DES is going to negotiate with affected dam owners and water user over the water use plans and then evaluate the economic impact. We have made progress on conservation plan development, primarily getting data.

The third plan will be a dam management plan that applies to all the dam owners (over 10 acres). The focus is on water storage and operation and the ability of the facility to augment flows. We have gathered information on all the dams and conducted sites visits for almost all the dams. A questionnaire will go out to dam owners shortly to confirm information. Most of the information is available through the DES Dam Bureau. A report will be prepared on the environmental impacts on the impoundment and downstream resources if water is released to augment flows; water levels for recreation concerns; and the ability to meet the protected flow requirements. DES will also meet and negotiate with affected dam owners to meet the flow requirements as well as conduct an economic assessment of implementation costs and schedules. We have received comments from Wayne Ives on the draft dam management plan format, which is still in the early stages of development. The plan will integrate information from the conservation plan, water use and dam management plans and it specify conservation and operational measures based on the information that was gathered. It will develop an implementation schedule and identify and evaluate financial assistance available to agriculture and public water supply users to meet the plan. The goal is to complete the Water Management Plan by the Summer of 2008 and review of the final report by January 2009.

Questions

Brandon Kernon – Were there any non-registered water users that were accessing the river?

AI – We have not gone beyond the data that has been required so far. There are two projects, which we are going to follow up on. One project is a proposed golf course and the redevelopment of a groundwater supply. They haven't reported yet.

Tom O'Neil – When you say that this applies to all water users, is this just the people going over 20,000 gallons.

Wayne – Yes, if you are no longer require to report. All that criteria no longer applies to you and you drop off of the affected water users list.

Tom O'Neil - Why did you stop at 2004 with the water use requirement?

AI – That is when things [Instream Flow contract] were starting. We had data up to that point.

Peter de Bruyn Kops – When you have done all this and have met the protected flows and another user comes along that wants to use large amounts of water and will an employee a thousand people and is politically popular. What do you do? Do you rewrite all of the plans?

Wayne – Yes, we do have to do something to revise how water is used. We still have to meet the protected flows. And this is something I have a hard time answering generically because each case is so site-specific. How much water will they use? What are their operational variations? What are the possibilities for them using and returning water at the same location. Some of the large water users have become non-consumptive because they are using less water and returning more. There is some flexibility in the river system, but the water management plans will need to address low flows.

Someone may buy out another business out to get their water. With a water management plan we will have management and processes that identify where and when the water is available.

Carl – You won't have to revise the entire plan, just small pieces of it.

Al – We are at the beginning stage and hopefully these management options will be discussed as we go down the road. The first thing is to get each of plans developed so we know what the water uses and the needs are.

Brandon – In one of the documents I read, I believe it was the summary, the number of water withdrawals are close to where are returns are on the river. I don't know how this will be applied to that. Will they wash each other out before they get that gage? Is there any analysis that someone can bypass the conservation and water use plan if withdrawals and returns are close somewhere?

Al – That is going to be evaluated because we have both dischargers and sources and this affects the public water supply systems. Where you do have extraction and use but most of it does go out through the wastewater treatment facilities.

Wayne – That is right. There needs to be assessments for uses like the fish hatchery and the municipal systems that take and return water before the gage. That impact is going to show the net results at the gage or at the reference location but it won't show the impact occurring in between the withdrawal and return points. That impact on that stretch will need to be addressed in some way. We will make that part of water management plan. Putting another water withdrawal between the Milford Fish Hatchery where they take the water out in the wells and return it to Purgatory Brook is probably not a good idea. Finding a location downstream of a wastewater treatment facility discharge might be a good idea because for a business because they are at a location where the water is being augmented. Locating a business where it makes sense is where planning and management ideas come in. It is just one more factor like roads and power supply to consider when locating a business.

Nelson Disco – Is there a way to look at dams under 10 acres? Did you measure it to know how much it is?

Al – We are relying on the data provided to Dam Bureau for the maximum storage surface area. Greater than 10 acres is defined in the Instream Flow Rules as an affected dam.

Wayne – The ten acres was decided because a lot of small dams are not operational so they don't tend to change the availability of the water in the river very much. They have a limited amount of storage. It would have taken a lot of manpower without much return and that is why they are not included. Smaller impoundments just aren't that useful in the development of water management plans.

Nelson - Do you know what percent?

Wayne – We haven't even considered it. They tend to only support a fixed pool and don't have a lot of storage. When we do dam management we try to accomplish a two day creation of flows that will reset the duration and give the fish a chance to recover from catastrophic or stressful flow conditions. We hope to provide enough support for the species of fish to get through that period. The purpose is not to maintain higher flow levels for a long duration. The available storage in any watershed is limited to the point where you wouldn't be able to provide long durations of appreciable flow. We will be able to provide the brief pulses of flow that can be supportive of fish species that need that flow. The temperature issue becomes part of this too. There is more than volume for releases of water in the impoundments greater than 10 acres.

Bob Courage – The Dam Management Plan will have to have language to avoid incidents that Milford had last April. The Greenville Dam released water when we were almost at flood condition. It broke the flash boards on the Wilton Dam and inundated our water control facility. We were without town water for five days. Fortunately we had inter-municipal connection with the Pennichuck Water Company. It flooded our waste facility main pump station. These things should be taken in

consideration before it reaches a climax. If you have a weather forecast that exceeded the river requirement, something should trigger dam operators to start releasing water instead of waiting. It is a question of the dam breaking.

Al - I believe that Jim Gallagher has been here to meet with individuals regarding dam management. It came up in our meeting so we have to discuss this further.

Wayne – The idea of continual management will mean that, if you are actively managing instead of intermittently managing, which is the current procedure for dams, then you will have better control over this. People will converse about not only how their dams are impacted by stream flow issues but will also have to be aware of how downstream dams and affected water users. Active management will improve the conditions that Mr. Courage is concerned about.

One of the concepts of the Water Management Plan is to incorporate a rainfall forecasting page. If four days of catastrophic duration occurs and a rainfall is predicted, it may negate the need to take action. The Dam Bureau has models that do this because of their need to identified stream flow conditions change. We may be able to use that model to offset some of the durations and we hope to incorporate the model into the water management process. A lot of work still needs to be done on that.

The Water Management Planning Advisory Committee will review the interim product [sub-plans of the water management plan] and we will meet with dam owners and users and have them respond to us what does and doesn't work for them. What conditions are necessary for their business, what can they do without, and what can they be flexible about? This idea is a management plan that not only meets the required flow but also the water users' need to use the river. We are trying to balance this as resources we can use and also support the resources and characteristics of the river.

Larry Anderson - Who will be responsible for monitoring the stream gages?

Wayne – Right now there are only temporary stream gages in the upper part of the watershed. We requested funds in the capital budget a few years ago. We want to add more gages around the state. It seems certain that we are going to add another stream gage in the upper Souhegan. A USGS gage in the upper part of the watershed will support the instream flow program. The index location, SR25, is a temporary location.

We use the USGS gage at Merrimack to represent most of the conditions on the river, basically the lower end and this other gage would be available to represent the conditions on the upper part of the Souhegan. We can use the Lower Souhegan and extrapolate it out using those cfsm values, but it becomes more tenuous and less certain the further you get up the watershed. We want to add another gage to provide more fixed and precise point and then we can move up and down using both gages when we are between them and then upstream of the upper gage we can use the upper gage. These gages are going to run by USGS. All that information comes on the USGS website every fifteen minutes and it comes out with a daily summary result. That information then gets plugged into a graph that shows where we stand relative to the protective flows. It will be very clear what the upcoming status is. The information will trigger water management. We would like to get USGS stream gages on all the designated rivers. In some cases, people may want a gage near their own location of withdrawal. At Loon Mountain there is a gage in Lincoln and that gage drives what they have available for withdrawal. Water Users can develop their own gage at their own location but we avoid requiring that because of the cost. It may be worth it for some water users to fund their own gage.

George – Where is the location of the upstream gage?

Wayne – I am not sure but I believe it is up near Wilton. It is in the PISF report. There is a map that shows the division of eco-regions and I believe one of the dots show SR25.

George – If someone wanted to put additional gages, or if there were to be temporary gages to get some historical data?

Wayne – This has been done. We did a series of temporary gages that show locations and the flows relative to the Merrimack gage.

George – If people wanted to do that, they could be staff gages?

Wayne – Yes, if people have an interest and in some cases in MA there are stream gages run by volunteers. Generally they have to be a smaller portion of the river because they need to get out in the water and make a rating curve by standing in the water and measuring the velocity and depths in a number of different locations. You can then correlate that with a staff gage that you can read on a daily basis. That is what USGS does only on a more technical level. There is an existing staff gage on the Souhegan at the near the OK Tool Superfund Site.

Brandon – I am familiar with another watershed in which dams caused a major displacement in the river. Has an analysis been done on the Souhegan to see if that is the case or if it is a collective use of the water users that are causing flow issues?

Al – The only thing that has been done preliminarily is looking at the storage numbers for the impoundments and the basin. That was the first cut to see where the water was at and that was a very rough analysis.

Wayne – The initial review of the dams in the Souhegan was that, on a day to day basis, there are no large storage and release facilities. Dams are not causing a day to day storage issue or change in stream flow. There are shorter term storage and release dams upstream that can cause local variation upstream during a day. The initial investigation revealed they were all hydropower.

Brandon – Even recreational dams with high lake elevations displace the flow of water from the river system.

Wayne – As part of the pilot process, when we start to realize that they will play a part to this we will add components to instream flow and water management plan process. This is why we did the pilot program to begin with, to see what things we did not think of, and what do we need to readdress with the legislature.

Brandon – I would like to make one more comment on conservation versus water use restriction. When you are looking at the conservation plans you need to look at existing investments in infrastructure. People may have in the past been using water efficiently and you are asking them to conserve more or restrict water use. There are two universes of water users out there with some in between. To ask someone who has been conserving is more unfair than to ask someone who has made no effort.

Al – In the initial response that we got from the affected water users we noted that most irrigation users have taken measures to implement water use and they specifically site the DES conservation measures for their particular uses. Most of the responses we received acknowledged the need for conservation. In fact, the majority of them have implemented some type of water conservation measure.

Wayne – Any conservation measures already taken will be credited. It will be part of their conservation plan. We are not going to penalize people for being proactive.

Carl – One of the big problems is impervious surfaces that change a runoff pattern and make a river more susceptible to flash flooding, longer flood levels and low flows, etc. Is there a process to look at this and address it?. If a community wanted to reduce and remove impervious surfaces and replace them by pervious surfaces. If that is mechanism that might address a regions problem, is there a way to appropriate that? I realize that is a far-fetched scenario right now.

Wayne – This is an answer to what Peter said earlier. What can you do if you have a large employer coming in? Under this program, immediately, the answer is no. Right now we are dealing with all the bio-metric changes in flow, recognizing that temperature might be a problem. In the long-term, as this

program develops, what will happen is that we will be able to take advantage of conditions like that. [Offsetting stream flow problems with land use changes like impervious surfaces and riparian buffers.] We know there is a lack of riparian vegetation that seeps water into the system. There are all sorts of impervious surfaces that change that. If we offset some of those changes we would have more water available during the low flow time of the year. Some of the things we can do include replacing pervious surfaces with permeable or reusing stormwater instead of discharging it into the river, so it would be considered a resource instead of a waste. This won't happen under these flow rules because we lack that authority. As we develop those other standards of how a healthy system works we can take advantage of those things to offset water use with the supplemental, environmental responses and putting those in place so we don't have to say that the water is not available. The answer is ultimately yes, but, in the short-term, no.

Carl – I guess that originally the legislature contemplated that but you may be able to be creative in the conservation planning process.

Wayne – Someone has to develop the information so the legislature can see that this can be done. We don't have that kind of flexibility at this point.

4:15 – 4:30 Other Business

The next meeting will probably take place in late winter, depending on how long the sub-plans take to be developed. Peter de Bruyn Kops is the co-chair and you can call him and suggest a meeting, or you may call Wayne.

Questions

George – Will we get a chance to see the stuff in the process before the meetings?

Al – Yes. The affected dam and water users will be receiving drafts and when comments are returned, we will be an opportunity to have a meeting to state any concerns. The plans will be developed individually but ultimately there will be a communal document being the Water Management Plan.

Wayne – Some people may want some privacy. The final plans are public record, but drafts don't have to be.

Al – I want AWU and ADO's to understand this is going to be a public document. There may be some business-sensitive proprietary information such as actual operations. Water use information reported to the state, such as water use information is public. We have information on the dams, but the actual operations may be business sensitive.

Carl – Clearly there are other interests beside AWUs and ADOs, such as conservation and recreation. It doesn't sound like that they are going to be given much say. If the dam plan is not developed in conjunction with the water users so that everyone is laying their cards on the table, you may not be able to maximize that solution. I envisioned that all the interests would be more involved?

Wayne – How do envision that happening? You have a certain amount of dam owners and water users. How would the committee functionally weigh in on a short time scale?

Carl – It sounds like the intent is to have dam owners, who may not involved in the committee, develop the dam management plan and come back to the committee and ask for approval. I was thinking of those people [conservation and recreation interests] being involved in the development of the plan so they won't be reactive to something that gets put in front of them. I don't have any specific ideas except that everybody should be engaged at each level to the extent that they can.

Peter de Bruyn Kops – The flows that were needed to support recreational needs were met first by the protected instream flow study. Once the recreational needs were taken care of the focus was then the water users to see that the levels can be meet. My view is that you don't want to get into minute details of operating procedure with so many people involved. I think that splitting it into two pieces is the best use of time.

Wayne – I envisioned that the Normandeau people would be speaking to each dam owner and water user. They together can figure out something that makes sense to them as far as the flow needs that need to be protected in relationship with flexibility in water use and conservation management. We try to put something together that fits both the individual water user and dam owners and as a collective plan will protect the instream flow. Then bring the individual and collective plans to this committee and ask for an opinion on whether everyone is contributing as they should be. Or are some people being unfairly penalized? This group [WMPAAC] represents the stakeholders: water users, dam owners, municipal water supplies, irrigation users, conservation, recreational users and legislators. It represents a microcosm of the watershed interests who then evaluate the resulting individual sub-plans and the resulting Water Management Plans to meet the protected instream flows. The committee has to take a number of different pieces and making sure that it blends together in a reasonable way. If we are going off base with one interest then it is the responsibility of the committee to discuss that point. There needs to be open dialog but it shouldn't start at the level of the individual plans. When the individual plans are developed the committee will look at them to decide if they all fit together or does more emphasis need to be put on conservation, water use plans, or dam management? I had an idea of a water management plan that was made up of individual water users. If we encounter an issue then you as stakeholders must make a decision as to how to resolve it.

Carl – The impression that I got is that the group wouldn't be getting together until the near the end of the plan development process and everyone's time is important, so I am not suggesting a lot of meetings. It becomes clear that there might be some leveling of flow so that the river loses some level of flow or some aspect of hydrology that is important to the river. If you bring the plans together and that looks like a likely outcome you don't want to have to go back to renegotiate with each group.

Wayne - Protected flows are developed and were developed so that shouldn't be a problem.

Carl – Protected flows don't include the whole hydrology. That is the problem.

Wayne – They were intended to.

Carl – They were intended to protect specific interests, not the full hydrology of the river.

Peter de Bruyn Kops - This committee doesn't make the final decision. There have been public hearings and I am sure that not that many people showed up. It is not the committees' responsibility to make sure that the public shows up for their interests.

Al – You have made an excellent point and there was a public hearing relative to the PISF Report. Eight people attended the hearing. There will be another public hearing and the interests will be notified. We want to work with the committee and other stakeholders in the development of the sub-plans and ultimately the plan prior to the public hearing. That would be advantageous to all groups.

Wayne – The process will involve a pre-preview and it will go before a public hearing, no matter how many people show it. The real review actually happens outside of the public hearing. The hearing is a formality. When the PISF public hearing was held, a number of comments were received from people who did not attend but knew what was going on. The public hearing describes the report, but the report is 800 pages so a hearing doesn't answer all the questions. You actually have to read the report and make an evaluation. This is too complicated a document to get all the information you need from a public hearing. It is important for people to contemplate the facts before we go to the final process. That is what happened in the Instream Flow Technical Review Committee. It was presented numerous times to the TRC in various forms and problems were addressed. The hearing is required but the real review comes in the thirty day comment period [Note also there is 30-day period before the public hearing where the report is readily available]. After that the comments are incorporated into the revisions. I am tempted to have another WMPAC meeting after the public hearing. If the public hearing hasn't resolved all the issues, which it may not, we may have to have another WMPAC meeting to review the comments and revise the plan.

If people have ideas and suggestions on how to make this review and development process better, then please suggest them. Our intention is to bring the plans together for dam owners and water users and bring something that is at least partially formed that meets the criteria to the committee and evaluate that based on the level of effort of each of the dam owners and water users. Clearly this will have potential for economic costs. We hope conservation plans will be somewhat self-supporting. We will spread this [implementation] out over the course of years so the implementation is not going an immediate burden and will be supported by the state or grants. We recognize that this is not going to be turned around in a short amount of time.

Steve Densberger - You have to start with the draft. Once they are drafted they can be posted so people can read and make their comments them. The websites are good tools to read a draft or proposal and making comments.

Wayne – We also have an FTP site which we can make available to committee members with a password so they can have access. The committee can take drafts and look at them. That is up to the committee too but there are the sensitivities of the dam owners and water users to consider. They may have a valid reason to keep information private.

4:50 Meeting adjourns